

CHAPTER 1: GENERAL APPLICABILITY

1.1 INTRODUCTION

The purpose of this chapter is to help you determine if you are subject to Part 68, the risk management program rule. Part 68 covers you if you are:

- ◆ The owner or operator of a stationary source (facility)
- ◆ That has more than a threshold quantity
- ◆ Of a regulated substance
- ◆ In a process.

The goal of this chapter is to make it easy for you to identify processes that are covered by this rule so you can focus on them.

This chapter walks you through the key decision points (rather than the definition items above), starting with those provisions that may tell you that you are not subject to the rule. We first outline the general applicability provisions and the few exemptions and exclusions, then discuss which chemicals are "regulated substances." If you do not have a "regulated substance" at your site, you are not covered by this rule. The exemptions may exclude you from the rule or simply exclude certain activities from consideration. (Throughout this document, when we say "rule" we mean the regulations in part 68.)

We then describe what is considered a "process," which is critical because you are subject to the rule *only* if you have more than a threshold quantity in a process. The chapter next describes how to determine whether you have more than a threshold quantity.

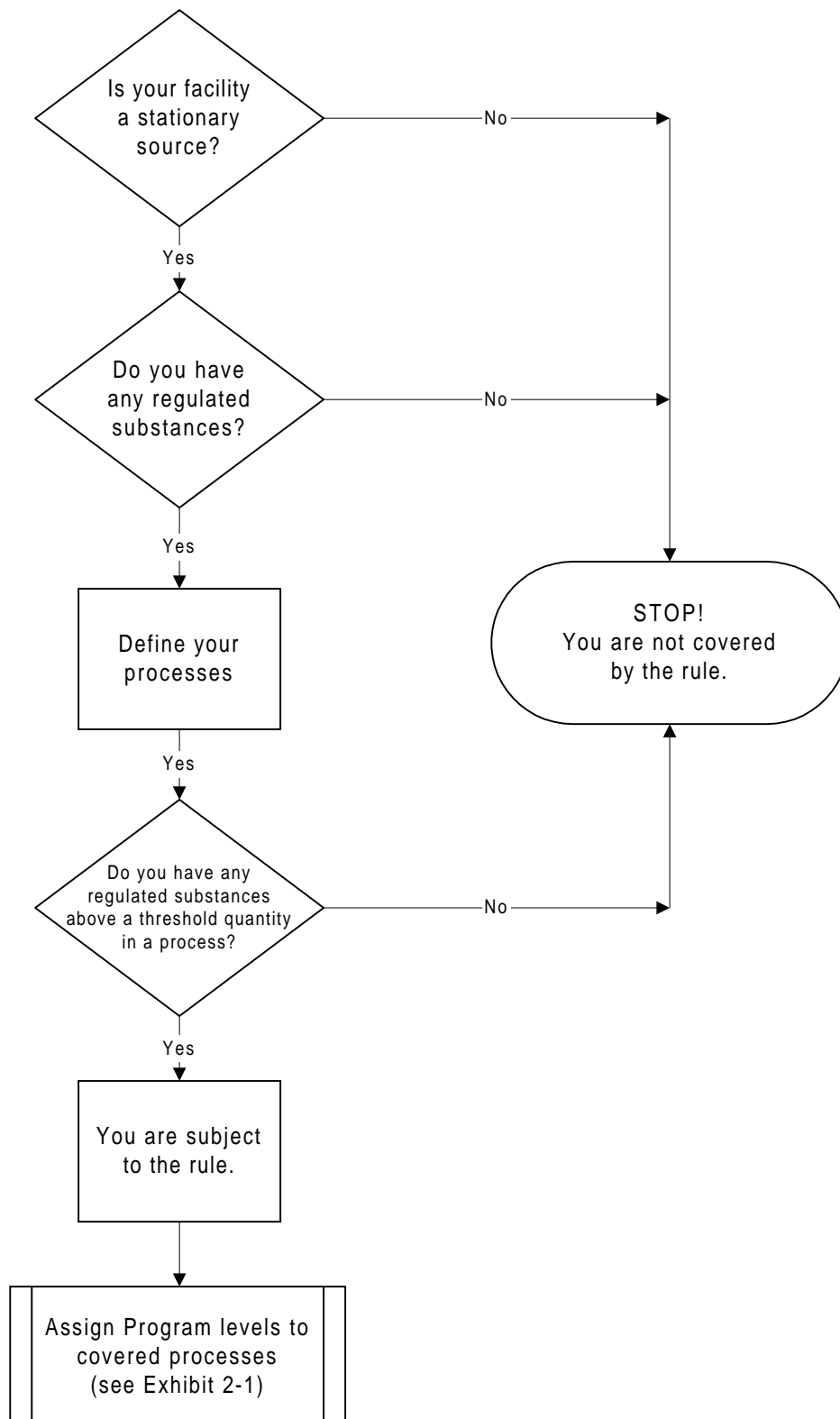
Finally, we discuss how you define your overall stationary source and when you must comply. These questions are important once you have decided that you are covered. For most WWTPs covered by this rule, the stationary source is basically all covered processes at your site. Exhibit 1-1 presents the decision process for determining applicability.

STATE PROGRAMS

This guidance applies to only 40 CFR part 68. You should check with your state government to determine if the state has its own accidental release prevention rules or has obtained delegation from EPA to implement and enforce part 68 in your state. State rules may be more stringent than EPA's rules. Unless your state has been granted delegation, you must comply with part 68 as described in this document even if your state has different rules under state law. See Chapter 10 for a discussion of state implementation of part 68.

EXHIBIT 1-1

EVALUATE FACILITY TO IDENTIFY COVERED PROCESSES



1.2 GENERAL PROVISIONS

The CAA applies this rule to any person who owns or operates a stationary source. "Person" is defined to include

"An individual, corporation, partnership, association, State, municipality, political subdivision of a state, and any agency, department, or instrumentality of the United States and any officer, agency, or employee thereof."

The rule, therefore, applies to all levels of government as well as private businesses.

CAA section 112(r)(2)(c) defines "stationary sources" as:

"Any buildings, structures, equipment, installations, or substance emitting stationary activities

- ◆ Which belong to the same industrial group,
- ◆ Which are located on one or more contiguous properties,
- ◆ Which are under the control of the same person (or persons under common control), and
- ◆ From which an accidental release may occur."

EPA has added some language in the rule to clarify issues related to transportation (see below).

TRANSPORTATION ACTIVITIES

The rule applies only to stationary sources. Pipelines covered by DOT or under a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. 6010.5 are not covered. WWTPs are unlikely to have such pipelines on their property. Piping at your source, however, is covered.

Transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source are considered part of the stationary source. Transportation containers that have been unhooked from the motive power that delivered them to the site (e.g., truck or locomotive) and left on your site for short-term or long-term storage are part of your stationary source. For example, if you have railcars on a private siding that you use as storage tanks until you are ready to hook them to your process, these railcars should be considered to be part of your source. If a tank truck is being unloaded **and** the motive power is still attached, the truck and its contents are considered to be in transportation and not covered by the rule. You should count only the substances in the piping or hosing as well as the quantity unloaded. Some issues related to transportation are still under discussion with DOT.

Qs & As
STATIONARY SOURCE

Q. What does “same industrial group” mean?

A. Operations at a site that belong to the same three-digit North American Industry Classification System (NAICS) code (which has replaced the old two-digit SIC codes) belong to the “same industrial group. In addition, where one or more operations at the site serve primarily as support facilities for the main operation at the site, the supporting operations are part of the “same industrial group” as the main operation. For example, if you manufacture chemicals (NAICS 325) and operate a waste treatment facility (NAICS 562) that handles primarily wastes generated by your chemical operations, the waste operation would be considered a support operation. POTWs are unlikely to share a site with any operation that is not in the same industrial group; both water and wastewater (sewage) treatment are in NAICS code 221.

Q. What does “contiguous property” mean?

A. Property that is adjoining. Public rights-of-way (e.g., railroads, highways) do not prevent property from being considered contiguous. Property connected only by rights-of-way are not considered contiguous (e.g., two plants with a connecting pipeline).

Q. What does “control of the same person” mean?

A. Control of the same person refers to corporate control, not site management. If two divisions of a corporation operate at the same site, even if each operation is managed separately, they will count as one source provided the other criteria are met because they are under control of the same company.

RELATIONSHIP TO OSHA PROCESS SAFETY MANAGEMENT STANDARD EXEMPTIONS

The OSHA Process Safety Management (PSM) standard (29 CFR 1910.119) exempts hydrocarbon substances used solely as a fuel if such substances are not part of a process containing another regulated substance and flammable liquids stored in atmospheric storage tanks. In addition, state and local governments are not subject to federal OSHA standards, but are subject to OSHA rules if their state has a delegated OSHA program (see Chapter 2). The OSHA exemptions do not apply or extend to EPA's Risk Management Program Rule. Your processes are not exempt from the Risk Management Program simply because they qualify for one of the OSHA exemptions. EPA's rule covers substances used as fuel, substances stored in atmospheric storage tanks, and state and local governments if they own or operate a facility where there is more than a threshold quantity in a process.

1.3 REGULATED SUBSTANCES AND THRESHOLDS (§ 68.130)

The list of substances regulated under § 68.130 is in Appendix A. Check the list carefully. If you do not have any of these substances (either as pure substances or in

mixtures above 1 percent concentration) or do not have them above their listed threshold quantities, you do not need to read any further because you are not covered.

The list includes the following chemicals that are commonly used at WWTPs:

	<u>EPA Threshold Quantity</u>	<u>OSHA Threshold Quantity</u>
Chlorine	2,500 pounds	1,500 pounds
Anhydrous Ammonia	10,000 pounds	10,000 pounds
Aqueous Ammonia (concentration 20% or greater)	20,000 pounds	15,000 pounds (>44%)
Anhydrous Sulfur Dioxide	5,000 pounds	1,000 pounds (Liquid)
Methane	10,000 pounds	10,000 pounds
Propane	10,000 pounds	10,000 pounds

For methane, the 10,000-pound threshold applies to the total weight of the flammable mixture of digester gases, not just the weight of methane or flammables in the mixture. For aqueous ammonia, the threshold applies only to the weight of ammonia in the mixture.

In general, regulated chemicals in a wastestream at a POTW will not exceed one percent of a mixture and thus will not be covered by part 68. If an industrial WWTP has more than 1 percent of a regulated substance in the wastestream, the quantity of the substance in the wastestream will have to be determined and compared to the threshold quantity. Oxygen is not subject to either part 68 or OSHA PSM. Ozone is also not subject to part 68, although it is covered by OSHA PSM.

1.4 WHAT IS A PROCESS

The concept of "process" is key to whether you are subject to this rule. Process is defined in 40 CFR § 68.3 as:

"Any activity involving a regulated substance, including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process."

"Vessel" in § 68.3 means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

EPA's definition of process is identical to the definition of process under the OSHA PSM standard. Understanding the definition of process is important in determining whether you have a threshold quantity of a regulated substance and what level of requirements you must meet if the process is covered.

What does this mean to you?

- ◆ If you store a regulated substance in a single vessel in quantities above the threshold quantity, you are covered.
- ◆ If you have interconnected vessels that altogether hold more than a threshold quantity, you are covered. The connections need not be permanent. If two or more vessels are connected occasionally, they are considered a single process for the purposes of determining whether a threshold quantity is present.
- ◆ If you have multiple unconnected vessels, containing the same substance, you will have to determine whether they need to be considered together as co-located.

A process can be as simple as a single storage vessel or a group of drums or cylinders in one location or as complicated as a system of interconnected vessels, pumps, piping, and storage vessels.

SINGLE VESSELS

If you have only a single vessel containing regulated substances, you need not worry about the other possibilities for defining a process and can skip to section 1.5. For the purposes of defining a threshold quantity, you need only consider the quantity in this vessel.

INTERCONNECTED VESSELS

In general, if you have two or more vessels containing a regulated substance that are connected through piping or hoses for the transfer of the regulated substance, you must consider the total quantity of a regulated substance in all the connected vessels and piping when determining if you have a threshold quantity in a process. If the vessels are connected for transfer of the substance using hoses that are sometimes disconnected, you still have to consider the contents of the vessels as one process, because if one vessel were to rupture while the hose was attached or the hose were to break during the transfer, both tanks could be affected. Therefore, you must count the quantities in both tanks and in any connecting piping or hoses. You cannot consider the presence of automatic shutoff valves or other devices that can limit flow, because these are assumed to fail for the purpose of determining the total quantity in a process.

Once you have determined that a process is covered (the quantity of a regulated substance exceeds its threshold), you must also consider equipment, piping, hoses, or other interconnections that do not carry or contain the regulated substance, but that are important for accidental release prevention. Equipment or connections which contain utility services, process cooling water, steam, electricity, or other non-regulated substances may be considered part of a process if such equipment could cause a regulated substance release or interfere with mitigating the consequences

of an accidental release. Your prevention program for this process (e.g., PSM program) will need to cover such equipment. If, based on your analysis, it is determined that interconnected equipment or connections not containing the regulated substance cannot cause a regulated substance release or interfere with mitigation of the consequences of such a release, then such equipment or connections could safely be considered outside the limits or boundaries of the covered process.

In some cases, determining the boundaries of a process for purposes of the RMP rule may be complicated. In the preamble to the June 20, 1996 rule (61 FR 31668), EPA clearly stated its intent to be consistent with OSHA's interpretation of "process" as that term is used in OSHA's PSM rule. Therefore, if your facility is subject to the PSM rule, the limits of your process(es) for purposes of OSHA PSM will be the limits of your process(es) for purposes of RMP (except in cases involving atmospheric storage tanks containing flammable regulated substances, which are exempt from PSM but not RMP). If your facility is not covered by OSHA PSM and is complicated from an engineering perspective, you should consider contacting your implementing agency for advice on determining process boundaries.

Co-LOCATION

The third possibility you must consider is whether you have separate vessels that contain the same regulated substance that are located such that they could be involved in a single release. If so, you must add together the total quantity in all such vessels to determine if you have more than a threshold quantity. This possibility will be particularly important if you store a regulated substance in cylinders or barrels or other containers in a warehouse or outside in a rack. In some cases, you may have two vessels or systems that are in the same building or room. For each of these cases, you should ask yourself:

- ◆ Could a release from one of the containers lead to a release from the other? For example, if a cylinder of propane were to rupture and burn, would the fire spread to other propane cylinders?
- ◆ Could an event external to the containers, such as a fire or explosion or collapse of collision (e.g., a vehicle collides with several stored containers), have the potential to release the regulated substance from multiple containers?

You must determine whether there is a credible scenario that could lead to a release of a threshold quantity.

For flammables, you should consider the distance between vessels. If a fire could spread from one vessel to others or an explosion could rupture multiple vessels, you must count all of them. For toxics, a release from a single vessel will not normally lead to a release from others unless the vessel fails catastrophically and explodes, sending metal fragments into other vessels. Co-located vessels containing toxic substances, however, may well be involved in a release caused by a fire or explosion that occurs from another source. The definition of process is predicated on the

assumption that explosion will take place. In addition, a collapse of storage racks could lead to multiple vessels breaking open.

If the vessels are separated by fire walls or barricades that will contain the blast waves from explosions of the substances, you will not need to count the separated vessels, but you would count any that are in the same room.

You may not dismiss the possibility of a fire spreading based on an assumption that your fire brigade will be able to prevent any spread. You should ask yourself how far the fire would spread if the worst happens — the fire brigade is slow to arrive, the water supply fails, or the local fire department decides it is safer to let the fire burn itself out. If you have separate vessels containing a regulated substance that could be affected by the same accident, you should count them as a single process.

PROCESSES WITH MULTIPLE CHEMICALS

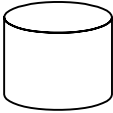
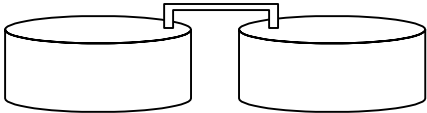
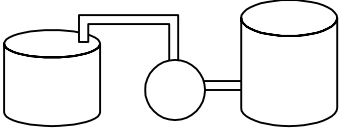
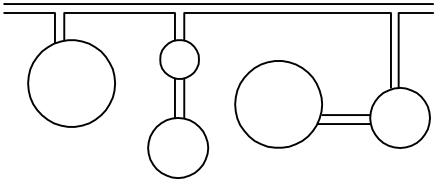
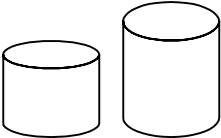
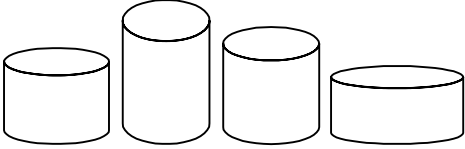

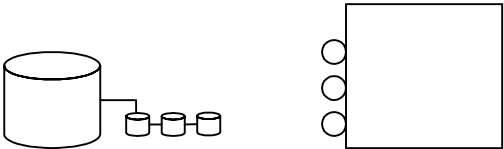
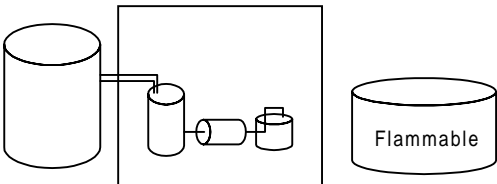
When you are determining whether you have a covered process, you should not limit your consideration to vessels that have the same regulated substance. A covered process includes any vessels that altogether hold more than a threshold quantity of regulated substances and that are interconnected or co-located. Therefore, if you have four storage or reactor vessels holding four different regulated substances above their individual thresholds and they are located close enough to be involved in a single event, they are considered a single process. One implication of this approach is that if you have two vessels, each containing slightly less than a threshold quantity of the same regulated substance and located a considerable distance apart, and you have other storage or process vessels in between with other regulated substances above their thresholds, the two vessels with the first substance may be considered to be part of a larger process involving the other intervening vessels and other regulated substances, based on co-location.

Exhibit 1-2 provides illustrations of what may be defined as a process.

DIFFERENCES WITH OSHA

OSHA aggregates different flammable liquids across vessels in making threshold determinations; OSHA also aggregates different flammable gases (but does not aggregate flammable liquids with flammable gases); EPA aggregates neither. Therefore, if you have three co-located or connected reactor vessels each containing 5,000 pounds of a different flammable liquid, OSHA considers that you have 15,000 pounds of flammable liquids and are covered by the PSM standard. Under EPA's rule, you would not have a covered process because you do not meet the threshold quantity for any one of the three substances. OSHA, like EPA, does not aggregate quantities for toxics as a class (i.e., each toxic substance must meet its own threshold quantity).

EXHIBIT 1-2: PROCESS

Schematic Representation	Description	Interpretation
	1 vessel 1 regulated substance above TQ	1 process
	2 or more connected vessels <i>same</i> regulated substance above TQ	1 process
	2 or more connected vessels <i>different</i> regulated substances each above TQ	1 process
	pipeline feeding multiple vessels total above TQ	1 process
	2 or more vessels co-located <i>same</i> substance total above TQ	1 process
	2 or more vessels co-located <i>different</i> substances each above TQ	1 process
	2 vessels, located so they won't be involved in a single release <i>same or different</i> substances each above TQ	2 processes
	2 locations with regulated substances each above TQ	1 or 2 processes depending on distance
	1 series of interconnected vessels <i>same or different</i> substances above TQs <i>plus</i> a co-located storage vessel containing flammables	1 process

QS & AS PROCESS

Q. How far apart do separate vessels have to be to be considered different processes?

A. There is no hard and fast rule for how great this distance should be before you do not need to consider the vessels as part of one process. Two vessels at opposite ends of a large warehouse room might have to be considered as one process if the entire warehouse or room could be engulfed in a fire. Two vessels separated by the same distance out of doors might be far enough apart that a fire affecting one would be unlikely to spread to the other. You may want to consult with your local fire department. You should then use your best professional judgment. Ask yourself how much of the regulated substance could be released if the worst happens (you have a major fire, an explosion, a natural disaster).

Q. We add chlorine to a wastestream which dilutes it. At what point does the process end?

A. The process ends when the concentration of chlorine in the wastestream is no longer above one percent, unless other regulated substances are present above their threshold quantities or the vessel is otherwise considered part of the process because it could cause a release of the covered vessels holding regulated substances or hinder a response to such a release.

1.5 THRESHOLD QUANTITY IN A PROCESS

The threshold quantity for each regulated substance is listed in 40 CFR 68.30, in Appendix A. You should determine whether the maximum quantity of each substance in a process is greater than the threshold quantity listed. If it is, you must comply with this rule for that process. Even if you are not covered by this rule, you may still be subject to reporting requirements under the Emergency Planning and Community Right to Know Act (EPCRA) because EPCRA section 312 requires reporting at lower thresholds for toxics and counts for threshold determination purposes the maximum quantity of each substance on the site as a whole rather than in a single process.

QUANTITY IN A VESSEL

To determine if you have the threshold quantity of a regulated substance in a vessel involved in a single process, you need to consider the maximum quantity in that vessel at any one time. You do not need to consider the vessel's maximum capacity if you never fill it to that level. Base your decision on the actual maximum quantity that you may have in the vessel. Your maximum quantity may be more than your normal operating maximum quantity; for example, if you may use a vessel for emergency storage, the maximum quantity should be based on the quantity that might be stored.

AGGREGATION OF SUBSTANCES

A toxic substance is never aggregated with a different toxic substance to determine whether a threshold quantity is present. If your process consists of co-located vessels with different toxic substances, you must determine whether each substance exceeds its threshold quantity.

A flammable substance in one vessel is never aggregated with a different flammable substance in another vessel to determine whether a threshold quantity is present. However, if a flammable mixture meets the criteria for NFPA-4 and contains different regulated flammables, it is the mixture, not the individual substances, that is considered in determining if a threshold quantity is present.

"At any one time" means you need to consider the largest quantity that you ever have in the vessel. If you fill a tank with 50,000 pounds and immediately begin using the substance and depleting the contents, your maximum is 50,000 pounds.

If you fill the vessel four times a year, your maximum is still 50,000 pounds. Throughput is not considered because the rule is concerned about the maximum quantity you could release in a single event.

For tanks, the maximum capacity can usually be found from "U1A" certificates for the vessels. The U1A certificates on all vessels constructed under the ASME Boiler and Pressure Vessel Code are kept on file by the National Board of Boiler and Pressure Vessel Inspectors.¹ The nominal nameplate capacity can also be found on the permanently attached nameplate for your storage tank. The nameplate will also have the National Board Number for your vessel, which is the key to retrieving your U1A form from the Board. These nameplates may be located on one of the hemispherical heads, the manway, or the manway cover of the tank. The nominal capacity will usually be the water capacity, and you may want to convert it to pounds.

If you use transportation containers (railcars or tank trucks) as storage vessels, you can obtain the capacity from the required DOT nameplate, identification plate, or specification plate or from the owner of the containers. Smaller shipping containers are also marked.

In calculating the quantity in a tank, you may take into account industry recommendations or regulatory limits on the percentage of the tank's total capacity that can be used, provided you comply with these limits. The Chlorine Institute recommends that chlorine tanks not be filled beyond 95 percent at a maximum temperature of 122 F. OSHA regulations (29 CFR 1910.111) limit liquid volumes of anhydrous ammonia. NFPA-58 (the National Fire Protection Association's

¹ National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229; <http://www.nationalboard.org>.

Standard for Storage and Handling of Liquified Petroleum Gases) recommends that propane tanks not be filled beyond 88 percent at 60 F. Aqueous ammonia may be held in various concentrations; your supplier can provide the density and weight. You can use this information, with your tank capacity, to estimate the quantity of ammonia being stored. The Compressed Gas Association provides recommendations on filling sulfur dioxide tanks at varying temperatures (CGA pamphlet G-3).

Methane, a regulated flammable substance, is a component of digester gas, commonly making up about 65 to 70 percent by volume of the total. Digester gas usually meets the NFPA-4 criteria that determine whether flammable mixtures are subject to part 68. You are more likely to have a threshold quantity of methane if you compress and store it, but you may also have a threshold quantity in the head space of the digester(s) and associated piping. To determine whether more than the threshold quantity of 10,000 pounds is present in the head space and connected piping, you must consider the total quantity of a flammable mixture containing a regulated flammable substance, so you must estimate the total quantity of digester gas, not just the quantity of methane in the gas, to determine whether you have a threshold quantity. For digester gas that is about 70 percent methane, at pressures not much above atmospheric pressure and temperatures of about 95 to 105 F, you may assume a density of approximately 0.06 pounds per cubic foot. The quantity of digester gas can be estimated from the volume of the digester in cubic feet (the overhead space and pipeline volume) as follows:

$$\text{Quantity (pounds)} = 0.06 \text{ pounds per cubic foot} \times \text{Digester Volume (cubic feet)}$$

For example, if the volume of digester gases in the head space and piping is 200,000 cubic feet, you would multiple 200,000 by 0.06; the quantity of digester gas is, therefore, 12,000 pounds. The digester volume must be about 167,000 cubic feet or more to contain a threshold quantity of flammable gas. At a methane percentage by volume of 64 percent, the density would be 0.062 pounds per cubic foot.

If you have compressed digester gas, you may estimate the density by applying a pressure factor as follows:

$$\text{Density at pressure Y} = 0.06 \times Y (\text{absolute pressure}) / \text{atmospheric pressure}$$

If you have more accurate information about the composition and properties of the digester gas, you may use this to develop a better estimate of the density of the gas and the quantity. If you are not sure of the concentration of methane, you should use 70 percent as a conservative estimate.

If the above calculations result in quantities close to the 10,000 pound threshold quantity, you may use the following general equation:

$$M_t = \text{Vol} \times \text{MW} / 379.5 \times 520 / (460 + T) \times (P) / 14.7$$

where M_t = total mass

MW	=	average molecular weight (lbs/mole) including water vapor
T	=	operating temperature (°F)
P	=	operating gauge pressure (psi)
1 psi	=	27.7 inches water column

Q & A CHANGING INVENTORIES

Q. I am considering changing from 2 one-ton tanks of chlorine to ten 150-pound cylinders to reduce my chlorine inventory below the RMP threshold quantity. Are there any reasons not to do this?

A. Reducing the inventory of regulated substances can be a sensible and appropriate risk-reduction option in some circumstances, but before you decide to switch to multiple smaller chlorine containers, you should carefully evaluate whether you might actually be *increasing* the risks to your workers and potentially the public. Using smaller containers or using the same one-ton chlorine tanks with a smaller quantity in each tank will require more frequent equipment connections and handling of chlorine containers. Each time workers must unload, move, and connect tanks or cylinders, there is an increased risk of a release. Also, 150-pound cylinder systems generally feed gaseous chlorine under pressure, while one-ton tanks use a safer vacuum-feed system. It may be easier, safer, and less costly in the long run to continue to use the larger containers that require less frequent handling, while implementing the appropriate accident prevention measures required by the rule.

Sources are advised that their standing in relation to the thresholds set under part 68 does not affect the applicability of the general duty clause under section 112(r)(1) of the Clean Air Act, which applies to all facilities that handle extremely hazardous substances. This clause creates a duty for the owner or operator of a stationary source having extremely hazardous substances, which include chlorine, “to identify hazards which may result from [accidental] releases..., to design and maintain a safe facility, and to minimize the consequences of accidental releases which do occur.” In view of the increased potential for accidental releases that 150-pound cylinders may pose in some circumstances, switching to such cylinders from safer one-ton tanks may raise questions as to whether you have fulfilled your obligations under the general duty clause. The general duty clause is already in effect, and EPA may take action to enforce it.

QUANTITY IN A PIPELINE

The maximum quantity in a pipeline will generally be the capacity of the pipeline (volume). In most cases, pipeline quantity will be calculated and added to the interconnected vessels. The quantity in a pipe can be calculated using the following general equation:

$$V = \pi r^2 L$$

Where	V	=	Volume
	r	=	Radius of the pipe

L = Length of the pipe.

INTERCONNECTED/CO-LOCATED VESSELS

If your process consists of two or more interconnected vessels, you must determine the maximum quantity for each vessel and the connecting pipes or hoses. The maximum for each individual vessel and pipe is added together to determine the maximum for the process.

If you have determined that you must consider co-located vessels as one process, you must determine the maximum quantity for each vessel and sum up the quantities of all such vessels.

QUANTITY OF A SUBSTANCE IN A MIXTURE

TOXICS WITH LISTED CONCENTRATION

Four toxic substances have listed concentrations in the rule: hydrochloric acid — 37 percent or greater; hydrofluoric acid — 50 percent or greater; nitric acid — 80 percent or greater; and ammonia — 20 percent or greater.

- ◆ If you have these substances in solution and their concentration is less than the listed concentration, you do not need to consider them at all.
- ◆ If you have one of these four above their listed concentration, you must determine the weight of the substance in the solution and use that to calculate the quantity present. If that quantity is greater than the threshold, the process is covered. For example, aqueous ammonia is covered at concentrations above 20 percent, with a threshold quantity of 20,000 pounds. If the solution is 25 percent ammonia, you would need 80,000 pounds of the solution to meet the threshold quantity; if the solution is 44 percent ammonia, you would need 45,455 pounds to meet the threshold quantity (quantity of mixture x percentage of regulated substance = quantity of regulated substance).

Note that in a revision to part 68, EPA changed the concentration for hydrochloric acid to 37 percent or greater (see Appendix A).

TOXICS WITHOUT A LISTED CONCENTRATION

For toxics without a listed concentration, if the concentration is less than one percent you need not consider the quantity in your threshold determination. If the concentration in a mixture is above one percent, you must calculate the weight of the regulated substance in the mixture and use that weight to determine whether a threshold quantity is present. However, if you can measure or estimate (and document) that the partial pressure of the regulated substance in the mixture is less than 10 mm Hg, you do not need to consider the mixture.

EPA treats toxic mixtures differently from OSHA. Under the OSHA PSM standard, the entire weight of the mixture is counted toward the threshold quantity; under part 68, only the weight of the toxic substance is counted.

FLAMMABLES

Flammable mixtures are subject to the rule only if there is a regulated substance in the mixture above one percent and the entire mixture meets the NFPA-4 criteria. If the mixture meets both of these criteria, you must use the weight of the entire mixture (not just the listed substance) to determine if you exceed the threshold quantity. The NFPA-4 definition is as follows:

"Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air, and that will burn readily. This degree usually includes:

- ◆ Flammable gases
- ◆ Flammable cryogenic materials
- ◆ Any liquid or gaseous material that is liquid while under pressure and has a flash point below 73 F (22.8 C) and a boiling point below 100 F (37.8 C) (i.e., Class 1A flammable liquids)
- ◆ Materials that will spontaneously ignite when exposed to air."

You do not need to consider gasoline, when in storage for use as fuel for internal combustion engines when you determine the applicability of the rule.

EXCLUSIONS (§ 68.115)

The rule has a number of exclusions that allow you to ignore certain items that contain a regulated substance when you determine whether a threshold quantity is present. Most of these exclusions will not be relevant to WWTPs.

ARTICLES (§ 68.115(b)(4))

You do not need to include in your threshold calculations any manufactured item defined at § 68.3 (as defined under 29 CFR 1910.1200(b)) that:

- ◆ Is formed to a specific shape or design during manufacture,
- ◆ Has end use functions dependent in whole or in part upon the shape or design during end use, and
- ◆ Does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

This exclusion is unlikely to apply to WWTPs.

USES (§ 68.115(b)(5))

You also do not need to include regulated substances in your calculation when in use for the following purposes:

- ◆ Use as a structural component of the stationary source;
- ◆ Use of products for routine janitorial maintenance;
- ◆ Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substances; and
- ◆ Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

ACTIVITIES IN LABORATORIES (§ 68.115(b)(6))

If a regulated substance is manufactured, processed, or used in a laboratory at a stationary source under the supervision of a technically qualified individual (as defined by § 720.3 (ee) of 40 CFR), the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exclusion does not extend to:

- ◆ Specialty chemical production;
- ◆ Manufacture, processing, or use of substances in pilot plant scale operations; and
- ◆ Activities conducted outside the laboratory.

A technically qualified individual is "a person or persons (1) who, because of education, training, or experience, or a combination of these factors, is capable of understanding the health and environmental risks associated with the chemical substance which is used under his or her supervision, (2) who is responsible for enforcing appropriate methods of conducting scientific experimentation, analysis, or chemical research to minimize such risks, and (3) who is responsible for the safety assessments and clearances related to the procurement, storage, use, and disposal of the chemical substance as may be appropriate or required within the scope of conducting a research and development activity."

This exclusion is unlikely to apply to WWTPs because you probably will not have more than a threshold quantity of a regulated substance in a lab.

1.6 STATIONARY SOURCE

The rule applies to "stationary sources" and each stationary source with one or more covered processes must file an RMP that includes all covered processes.

SIMPLE SOURCES

For most WWTPs covered by this rule, determining what constitutes a "stationary source" is simple. If you own or lease a property, your processes are contained within the property boundary, and no other companies (or agencies) operate on the property, then your stationary source is defined by the property boundary and covers any process within the boundaries that has more than a threshold quantity of a regulated substance. You must comply with the rule and file a single RMP for all covered processes. If this description applies to you, you may skip the rest of this section.

To belong to the same industrial group, either the operations at the site must be in the same three-digit North American Industry Classification System (NAICS) code (the equivalent of the old two-digit SIC codes), or one or more operations must be considered support activities for the main operation. POTWs are in NAICS code 22132 (sewage treatment); other WWTPs may be in NAICS code 56221 (waste treatment and disposal).

MULTIPLE OPERATIONS OWNED BY A SINGLE COMPANY

If the property is owned or leased by your company, but several separate operating divisions of the company have processes at the site, the divisions' processes may be considered a single stationary source because they are controlled by a single company. Two factors will determine if the processes are to be considered a single source: Are the processes located on one or more contiguous properties? Are all of the operations in the same industrial group?

If your company does have multiple operations that are on the same property and are in the same industrial group, each operating division may develop its prevention program separately for its covered processes, but you must file a single RMP for all covered processes at the site. You should note that this is different from the requirements for filing under CAA Title V, and EPCRA section 313 (the annual toxic release inventory), where each division could file separately if your company chose to do so.

OTHER SOURCES

There are situations where two or more separate companies occupy the same site. The simplest of these cases is if multiple companies lease land at a site (e.g., an industrial park). Each company that has covered processes must file an RMP that includes information on its own covered processes at the site. You are responsible for filing an RMP for any operations that you own or operate.

Another possibility is that one company owns the land and operates there while leasing part of the site to a second company. If both companies have covered processes, each is considered a separate stationary source and must file separate RMPs even if they have contractual relationships, such as supplying product to each other or sharing emergency response functions.

If you and another company jointly own a site, but have separate operations at the site, you each must file separate RMPs for your covered processes. Ownership of the land is not relevant; a stationary source consists of covered processes located on the same property and controlled by a single owner.

MULTIPLE LOCATIONS

If you have multiple operations in the same area, but they are not on physically connected land, you must consider them separate stationary sources and file separate RMPs for each, even if the sites are connected by pipelines that move chemicals among the sites. Remember, the rule applies to covered processes at a single location.

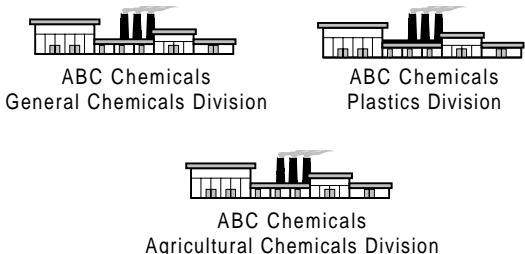
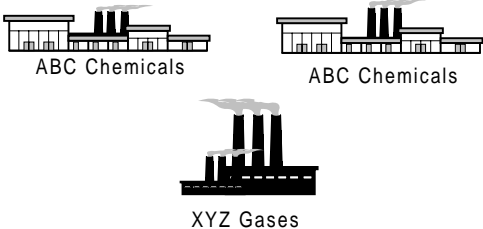
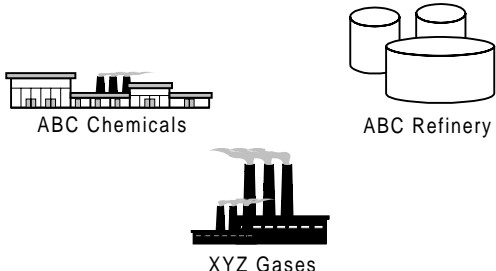
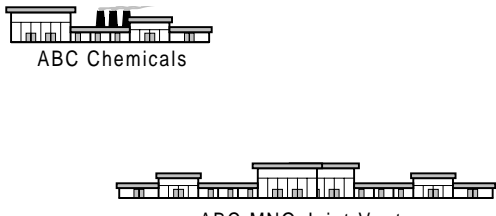
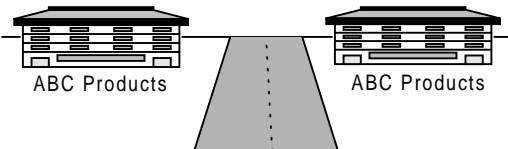
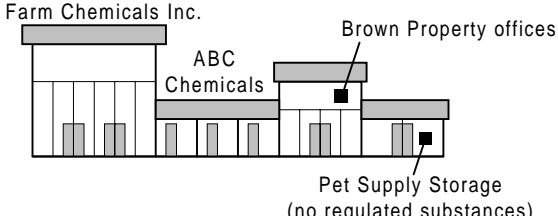
Exhibit 1-3 provides examples of stationary source decisions.

1.7 WHEN YOU MUST COMPLY

Prior to June 21, 1999, if you determine that you have a covered process, you must comply with the requirements of part 68 no later than June 21, 1999. This means that if you have the process now or start it on June 1, 1999, you must be in compliance with the rule on June 21, 1999. By that time you must have developed and implemented all of the elements of the rule that apply to each of your covered processes, and you must submit an RMP to EPA in a form and manner that EPA will specify prior to that time.

If the first time you have a covered process is after June 21, 1999, or you bring a new process on line after that date, you must comply with part 68 no later than the date on which you first have more than a threshold quantity of a regulated substance in a process.

EXHIBIT 1-3: STATIONARY SOURCE

Schematic Representation	Description	Interpretation
	<p><i>same owner</i> <i>same industrial group</i></p>	<p>1 stationary source 1 RMP</p>
	<p>two owners</p>	<p>2 stationary sources 2 RMPs 1 ABC 1 XYZ</p>
	<p>two owners three industrial groups</p>	<p>3 stationary sources 1 ABC Chemicals 1 ABC Refinery 1 XYZ Gases</p>
	<p>two owners</p>	<p>2 stationary sources 2 RMPs</p>
	<p><i>same owner</i> <i>same industrial group</i> contiguous property</p>	<p>1 stationary source 1 RMP</p>
<p>Building owned by Brown Properties</p> 	<p>two owners</p>	<p>2 stationary sources 2 RMPs 1 ABC Chemicals 1 Farm Chemicals</p>

QS & AS COMPLIANCE DATES

Q. What happens if I bring a new covered process on line (e.g., install a second storage tank) after June 21, 1999?

A. For a new covered process added after the initial compliance date, you must be in compliance on the date you first have a regulated substance above the threshold quantity. There is no grace period. You must develop and implement all the applicable rule elements and update your RMP before you start operating the new process.

Q. What if EPA lists a new substance?

A. You will have three years from the date on which the new listing is effective to come into compliance for any process that is covered because EPA has listed a new substance.

Q. What if I change a Program 2 process by adding new digester vessels, but do not change the substances?

A. Because increasing the number of digester vessels is a major change to your Program 2 process, you will have six months to come into compliance and update your RMP to reflect changes in your prevention program elements and report any other changes.

Q. What if the quantity in the process fluctuates? I may not have a threshold quantity on June 21, 1999, but I will before then and after then.

A. You do not need to comply with the rule and file an RMP until you have more than threshold quantity in a process; however, once you have more than threshold quantity in a process after June 21, 1999, you must be in compliance immediately. In this situation, with fluctuating quantities, it may be prudent to file by June 21, 1999, so you will be in compliance when your quantity exceeds the threshold.

Q. If we plan to switch chemicals in two years to non-regulated substances, do we have to comply by June 1999 if we are still using chlorine.

A. Yes, if you have more than a threshold quantity of a regulated substance in a process on June 21, 1999, you must comply with the rule and file your RMP by to that date. When you make the switch, if your facility as a whole is no longer covered, you should revise the registration on your RMP within six months to notify EPA that your facility is not subject to the rule. If only the chlorine process is no longer covered, you still must revise the RMP within six months.